

AMENDMENTS TO THE CLAIMS

1. (Canceled)
2. (Currently Amended) The method of claim 3 ~~[[1]]~~ wherein said SOP of said periodically changing polarization-scrambled optical signal is distributed substantially uniformly over said entire Poincaré sphere surface during each said time period.
3. (Currently Amended) ~~The method of claim 1 further comprising the steps of:~~  
A method of polarization-scrambling an incoming optical signal, comprising the steps of:  
causing a variation of the state of polarization (SOP) as a function of time for an incoming optical signal that has an unknown SOP to produce a polarization-scrambled optical signal;  
periodically changing said SOP of said polarization-scrambled optical signal with time, such that said periodically changing polarization-scrambled optical signal covers approximately an entire Poincaré sphere surface during each time period of said periodic changing, over a plurality of periods;  
propagating said periodically changing polarization-scrambled optical signal through a fiber-optic transmission link that contains polarization dependent loss (PDL);  
producing a periodic variation as a function of time of the optical signal power of said polarization-scrambled optical signal propagating through said fiber-optic transmission link;  
and  
measuring said optical signal power variation in real time.
4. (Original) The method of claim 3 wherein said real-time measured optical signal power variation is selected from the group consisting of peak-to-peak optical signal power variation and root-mean-square optical signal power variation.
5. (Original) The method of claim 3 wherein said optical signal power variation is measured using a photo-detector.
6. (Original) The method of claim 3 wherein said fiber-optic transmission link contains at least one component selected from the group consisting of optical fibers and optical amplifiers.